

**RAPID RESOURCE ASSESSMENT
AND MANAGEMENT PLAN
STEELE OPEN SPACE
BOULDER COUNTY, COLORADO**

Prepared for—

City of Boulder
Open Space and Mountain Parks
66 S. Cherryvale Road
Boulder, Colorado 80303

Prepared by—

ERO Resources Corporation
1842 Clarkson Street
Denver, Colorado 80218
(303) 830-1188

ERO Project #4089

August 11, 2008

CONTENTS

Summary	1
General Description of Site Resources	1
Open Space Values Based on Resource Assessment.....	1
Management Issues Based on Resource Assessment	1
Introduction	2
Purpose.....	2
Methods	2
Report Organization.....	3
General Description.....	3
Location and Access	3
Acquisition.....	3
Land Use	4
Landscape Context.....	4
Neighboring Properties	4
Site Resources	5
Topography	5
Geology.....	5
Hydrology	6
Vegetation	7
Wildlife	9
Cultural Resources	10
Agriculture	10
Recreation	11
Property Infrastructure	11
Legal Considerations	12
Property Management Plan	13
Management Area Designation.....	13
Management Issues.....	13
Management Strategies.....	14

TABLE

Table 1. Noxious weeds present on the property.....	9
---	---

FIGURES

- Figure 1. Vicinity
- Figure 2. Property Location
- Figure 3. Property Features
- Figure 4. Soils
- Figure 5. Vegetation Communities

APPENDICES

- Appendix A: Photo Point Map and Photo Documentation
- Appendix B: Plant Species
- Appendix C: References

SUMMARY

STEELE PROPERTY		
APPROXIMATE SIZE	ACQUISITION DATE	CURRENT ZONING
95 acres	February 22, 2000	Agricultural
MANAGEMENT DESIGNATION	PUBLIC ACCESS	
Natural Area	Closed	

GENERAL DESCRIPTION OF SITE RESOURCES

The property is dominated by open grasslands and sinuous ravines along the eastern slopes of Table Mountain. A large area in the eastern half of the property consists of irrigated pasture. Two main ditches (Table Mountain Ditch and a lateral of the North Toll Gate Ditch) are found on the property, along with several lateral ditches. The property supports known occurrences of Bell's twinpod (*Pysaria bellii*) a rare plant species, as well as several small pockets of riparian vegetation in the narrow drainages. Most of the grasslands have been altered by livestock grazing and are dominated by nonnative species.

OPEN SPACE VALUES BASED ON RESOURCE ASSESSMENT

The property is important for open space because it maintains—

- The visual integrity of the east slopes of Table Mountain
- Diverse topography and soils that are uncommon in the area
- Population of Bell's twinpod (*Physaria bellii*), a rare plant species
- Important irrigated agriculture and grazing values

MANAGEMENT ISSUES BASED ON RESOURCE ASSESSMENT

Some management issues that could adversely affect the open space values on the property include—

- Several instances of Mediterranean sage, a high priority noxious weed, and other weed species
- Several areas of the west boundary fence that are missing or are in poor condition
- Ditch water cascading down a steep, erosive slope – the result of an old ditch blowout
- Scattered trash and debris associated with the nearby antenna sites

INTRODUCTION

PURPOSE

The City of Boulder Open Space and Mountain Parks Department (OSMP) retained ERO Resources Corporation (ERO) to conduct a rapid resource assessment and develop a property management plan for the 20-acre Steele Property (“property”) near the city of Boulder in Boulder County, Colorado (Figure 1). The conditions on the property have generally been documented through photo points (Appendix A). The purpose of this rapid resource assessment and management plan for the property is to—

- Summarize the physical/ecological characteristics and conditions
- Document and record existing conditions and open space values
- Identify and prioritize management needs and opportunities
- Prescribe management actions
- Classify the property into a management area

The OSMP Visitor Master Plan directs that plans be completed for properties before they are opened and that visitor access be considered. Specific guidance for new properties is as follows:

New Property Planning and Facilities. Complete planning and infrastructure improvements in a timely manner, prior to opening newly acquired properties to public access. However, as appropriate, preserve existing public access during the planning and improvement process. Open Space and Mountain Parks will complete a site management plan recommending appropriate locations, types of uses and visitor infrastructure, and how to provide adequate visitor infrastructure and services.

Property plans direct immediate planning and improvement needs, while Trails Study Areas (TSA) planning will be used to periodically update visitor access needs based on conditions at the time.

METHODS

OSMP supplied records, documents, and GIS data applicable to the property. On June 4, 2008, a team of natural resource planners and ecologists from ERO walked the extent of the property documenting ecological and physical characteristics and identifying management needs and opportunities.

ERO consulted several organizations, agencies, and databases including the Colorado Natural Heritage Program (CNHP), Colorado Office of Archeology and Historic Preservation (OAHP), the Colorado Natural Diversity Information Source (NDIS), and Boulder County pertaining to resources on the property. Published information, such as U.S. Geological Survey (USGS) and Natural Resources Conservation Service (NRCS) maps, also was used to prepare the inventory.

REPORT ORGANIZATION

This report presents a summary of the information gathered for the rapid resource assessment and describes the results of ERO's evaluation of the resources and open space values on the property. The report is organized into five narrative sections and three appendices. Following the *Summary* and *Introduction*, the *General Description* section provides information on the setting. The *Site Resources* section summarizes the ecological and cultural resources; existing trails and access; land use and management; and improvements and legal considerations on the property. The *Property Management Plan* describes short- and long-term management needs, management actions, and Management Area designation.

Appendix A contains photographs of the property with narrative descriptions and a corresponding photo point map. Appendix B presents plant and animal species identified during the site visit, and Appendix C includes report references.

GENERAL DESCRIPTION

The property is located near the western edge of the Great Plains physiographic province. The property encompasses about 95 acres characterized by irrigated pasture land and mixed grassland on the east slopes of Table Mountain.

LOCATION AND ACCESS

The property is located in central Boulder County about 9 miles north of downtown Boulder (Figure 1). Specifically, the property is located in Sections 9 and 16 in Township 2 North, Range 70 West of the 6th P.M. (Figure 2).

Primary access is from North 55th Street along the eastern edge of the property. From downtown Boulder, travel north on Highway 36, turning right onto Nelson Road. Follow Nelson Road east to 55th Street. The property is located on the west side of 55th Street about ¼ of mile south of Nelson Road.

The primary access point is from a gate along 55th Street, near the center of the property. Emergency access would primarily be from this location. Another gate is located along 55th Street near the southeast corner of the property.

ACQUISITION

The City of Boulder acquired the Steele Property jointly with Boulder County on February 22, 2000. The fee purchase price for 65 acres was split evenly with Boulder County, in exchange for a conservation easement. The remaining 30 acres, which was already encumbered by a county NUPUD Outlot easement, was purchased in fee. The total purchase price for the two portions of the property and 75 shares of Left Hand Ditch Company water was \$481,250.00.

LAND USE

The eastern portions of the property are used for irrigated pasture, while the remainder of the property has been used for rangeland in the past and is currently managed as undeveloped open space land. There is currently no livestock grazing on the property.

LANDSCAPE CONTEXT

The property is located in rural Boulder County, and is surrounded primarily by agricultural lands to the east, and the Table Mountain antenna field (owned by the U.S. Department of Commerce) to the west. The Lykins Gulch corridor is located about ½ mile to the northwest of the property, while the Boulder Feeder Canal is located immediately east of the property.

NEIGHBORING PROPERTIES

NEIGHBORING AGRICULTURAL, RESIDENTIAL, AND COMMERCIAL PROPERTIES

Agricultural, residential, or commercial properties and basic land uses identified near the property during the site visit and with a property record search available through the Boulder County Assessor’s Office (Boulder County 2008a) are summarized below.

OWNER	LOCATION AND LAND USE
Steele Harold E. 5392 Nelson Rd. Longmont, CO 80503-9006 Parcel No. 131709000010	North of property Agriculture – farm/rural residence
Weisner, Melissa & Falborn, Edward F. 9087 N. 55 th St. Longmont, CO 80503 Parcel No. 131716000008	South of property Agriculture – farm/rural residence Site plan review for construction of 3,500 Sf. residence, 4,500 Sf. barn, and 1,250 Sf. shed.
Tobin, Stephen P. & Lauren R. 9285 N. 55 th St. Longmont, CO 80503-9052 Parcel No. 131716001002	Southeast of property Single family rural residence
Steele, John E. & Susan G. 9283 N. 55 th St. Longmont, CO 80503-9052 Parcel No. 131716001003	Southeast of property Single family rural residence

NEIGHBORING GOVERNMENT PROPERTIES

Government-owned properties and basic land uses identified near the property during the site visit and with a property record search available through the Boulder County Assessor's Office (Boulder County 2008a) are summarized below.

OWNER	LOCATION AND LAND USE
U.S. Government 8600 N. 39 th St. U.S. Department of Commerce Bureau of Standards (325 Broadway St., Boulder, CO 80303-3328) Parcel No. 131709000001	West of property Federal Non-residential <i>Table Mountain Field Site</i>

SITE RESOURCES

This section documents in more detail the basic physical and ecological characteristics and conditions that directly support the open space values of the property. Key features are shown on Figure 3.

TOPOGRAPHY

The property is located along the east facing slopes of Table Mountain. Elevations on the property range from about 5,260 feet along eastern boundary to about 5,400 feet along the western boundary, near the steeper slopes. Table Mountain reaches elevations of about 5,600 feet, off the property. The USGS Topographical map of the property is shown in Figure 2.

GEOLOGY

The property occurs along the western margin of the Denver Basin of northeastern Colorado, which contains sedimentary rocks of Cretaceous age. Generally the area includes the middle unit of Pierre Shale. Pierre Shale contains areas of sandstone. Some areas at the top of Table Mountain (off the property) include Older Gravels and Alluviums from unconsolidated surficial deposits and rocks of quaternary age (Tweto 1979).

SOILS

The Natural Resources Conservation Service (NRCS) has mapped five soil types on the property. Each mapping unit is described below and Figure 4 shows the NRCS soil mapping. All soil information was gathered from the NRCS soil survey (NRCS 1975).

Mapping Unit SaD. Samsil clay (3 to 12 percent slopes). This soil includes small areas of shale outcrop, a few areas of Shingle loam, and a few small areas of Renohill silty clay loam. In places this soil has scattered gravel and cobbles on the surface. Runoff is rapid and the erosion hazard is high. Native vegetation is mainly little bluestem, western wheatgrass, sideoats grama, blue grama, green needlegrass, sedges, and forbs.

Mapping Unit NuB. Nunn clay loam (1 to 3 percent slopes). This soil includes small areas of Kim soils, Nunn sandy clay loam, Nunn clay loam, and Valmont clay loam. Runoff is medium, permeability is slow, and the erosion hazard is moderate. Native vegetation is blue grama, buffalograss, needlegrass and wheatgrass.

Mapping Unit NuC. Nunn clay loam (3 to 5 percent slopes). This soil includes small areas of Kim soils and Nunn clay loam. In a few places scattered gravel and cobbles cover the surface. Runoff is medium, permeability is slow, and the erosion hazard is moderate. Native vegetation is blue grama, buffalograss, needlegrass and wheatgrass.

Mapping Unit Te. Terrace escarpments. These areas consist of undifferentiated shallow soils that have many cobbles and stones on the surface. In many places there is merely a thin layer of cobbles over sandstone or shale. Only limited moisture is available for plants because these undifferentiated soils are shallow. Runoff is rapid and the erosion hazard is high.

Mapping Unit AcC. Ascalon sandy loam (3 to 5 percent slopes). This soil includes areas where cobblestones are on the surface and small areas of Ascalon sandy loam (1 to 3 percent slopes). Runoff is medium and the erosion hazard is moderate to high. Native vegetation is chiefly short grasses, predominantly blue grama.

HYDROLOGY

SURFACE HYDROLOGY

Three unnamed drainages cross the property flowing from west to east. The property is not located within a designated floodplain.

According to topographic information from the USGS 7.5 minute quadrangle map, surface water on the property flows east (USGS 1968, photorevised 1979). Table Mountain Ditch crosses the southeastern corner of the property, while the Toll Gate Ditch enters the northwest corner of the property.

SUBSURFACE HYDROLOGY

Based on a review of the USGS Hygiene quadrangle, shallow ground water would flow in an easterly direction towards the Dry Creek drainage (USGS 1968; photorevised 1979). There are no permitted water wells on the property (CDWR 2008). One seep/spring area was identified in a ravine near the west boundary.

WETLANDS

While several small areas associated with irrigation drainage support potential wetlands, no significant wetlands were observed on the property.

VEGETATION

GENERAL VEGETATION DESCRIPTION

The property consists of native upland areas, upland areas seeded with crested wheatgrass (*Agropyron desertorum*), a smooth brome semi-natural herbaceous alliance, an introduced species agricultural pasture, and a cultivated grass hay alliance. The native areas are found along the slopes in the western half of the property and in the south and north. Native areas comprise a western wheatgrass herbaceous alliance (WWH), a needle-and-thread – blue grama herbaceous alliance, and a soapweed yucca shrub savannah herbaceous alliance. The crested wheatgrass alliance is located in a band near the middle of the property stretching towards the northeast. The cultivated grass hay alliance is in the eastern section of the property. Vegetation communities are described below and shown in Figure 5. A list of plant species identified during the field visit appears in Appendix B.

CRESTED WHEATGRASS HERBACEOUS (CWH)

The crested wheatgrass herbaceous alliance stretches in a band across the middle of the property to the northeast. This alliance is dominated by crested wheatgrass, and introduced perennial cool season grass. Other introduced perennial cool season grasses such as smooth brome (*Bromopsis inermis*) and intermediate wheatgrass (*Thinopyrum intermedium*); and introduced annual/biennial forbs such as littlepod false flax (*Camelina microcarpa*), common mullein (*Verbascum thapsus*), and tall tumbled mustard (*Sisymbrium altissimum*) are also found scattered within this community type.

WESTERN WHEATGRASS HERBACEOUS ALLIANCE (WWH)

The western wheatgrass herbaceous alliance is present in the southern and in patches in the western portion of the property as well as on slopes and rocky areas. Western wheatgrass, a native perennial cool season grass, is the dominant grass in this community but other native grass species such as needle-and-thread (*Hesperostipa comata*), purple threeawn, and Indian ricegrass are present. Introduced annual/biennial forbs such as small flower alyssum (*Alyssum parviflorum*), redstem stork's bill (*Erodium cicutarium*), and tall tumble mustard (*Sisymbrium altissimum*) are common. Native perennial forbs such as Kansas gayfeather (*Liatris punctata*), prairie flax (*Adenolinum lewisii*), scarlet globemallow (*Sphaeralcea coccinea*) are present.

NEEDLE-AND-THREAD – BLUE GRAMA HERBACEOUS ALLIANCE (NTH)

The needle-and-thread – blue grama herbaceous alliance is present in the northwest corner of the property as well as along slopes in the north. This alliance is dominated by needle-and-thread, blue grama grass. The soapweed yucca (*Yucca glauca*), an agavoid, and twistspine pricklypear, a succulent species, is also dominant in this community type.

SMOOTH BROME HERBACEOUS ALLIANCE (SBH)

The smooth brome herbaceous alliance is present in the northeast portion of the property. This alliance is dominated by smooth brome with very little diversity. The most dominant species occurring in this community type are crested wheatgrass and some species found within the crested wheatgrass herbaceous alliance.

SOAPWEED YUCCA SHRUB SAVANNAH HERBACEOUS ALLIANCE (SYSH)

Soapweed yucca shrub savannah herbaceous alliance is dominant on slopes in the northern section of the property. This alliance is dominated by soapweed yucca (*Yucca glauca*), a native agavoid. Other species such as needle-and-thread, and spike gilia (*Ipomopsis spicata*), and white prairie clover (*Dalea candida* var. *oligophylla*) are present.

INTRODUCED SPECIES AGRICULTURAL PASTURE (ISAP)

In the southeast corner of the property the introduced species agricultural pasture is present. This community is dominated by introduced perennial forbs, introduced annual/biennial forbs, native perennial cool season grasses, and introduced annual and perennial grasses. Field bindweed (*Convolvulus arvensis*) is the most dominant introduced perennial forb but other species such as horehound (*Marrubium vulgare*) are present. Redstem stork's bill (*Erodium cicutarium*) is present scattered throughout the property but is mainly found within this community type. Perennial cool season grasses such as smooth brome, and western wheatgrass (*Pascopyrum smithii*) are both dominants.

RARE PLANTS AND PLANT COMMUNITIES

Bell's twinpod (*Physaria bellii*) was found in the shale dominated slopes in the SYSH and NTH community types (Figure 3, Photo 41). Bell's twinpod is a species that is believed to be imperiled globally or in the state of Colorado (G2/S2). No rare plants or plant communities have previously been identified by CNHP on the property (CNHP 2006).

STATE NOXIOUS WEEDS

Based on the site visits, one List A noxious weed species was found on the property - Mediterranean sage (*Salvia aethiopsis*). Locations of the Mediterranean sage occurrences are shown on Figure 3. Four List B noxious weed species occur on the property: Canada thistle (*Cirsium arvense*), dalmation toadflax (*Linaria genistifolia* ssp. *dalmatica*), Russian olive (*Elaeagnus angustifolia*) and redstem stork's bill (*Erodium cicutarium*). Canada thistle occurs in the northeaster corner along the GH alliance, dalmation toadflax is found in two patches one is located in the southern WWH alliance and the other is located in a WWH alliance in the western section of the property, Russian olive was found at the northwestern corner of the GH alliance, and redstem stork's bill occurs in the WWH, the ISAP, and the CWH community types. Three List C noxious weed species were found on the property – field bindweed (*Convolvulus arvensis*), cheatgrass (*Anisantha tectorum*), and common mullein (*Verbascum thapsus*). Field bindweed is found scattered throughout the TSSH alliance and in the CWH alliance. Cheatgrass and common mullein is found in the northwestern portions in the WWH alliance. Smooth brome is not a state noxious weed but is considered an OSMP priority and is dominant in the GH and SBH alliances.

RAPID RESOURCE ASSESSMENT AND MANAGEMENT PLAN
STEELE OPEN SPACE
BOULDER COUNTY, COLORADO

Table 1. Noxious weeds present on the property.

Common Name	Scientific Name	OSMP Priority	Boulder County Weed List	State of Colorado Noxious Weed List
Canada thistle	<i>Cirsium arvense</i>	Moderate	x	B
cheatgrass (downy brome)	<i>Anisantha tectorum</i>	High	not listed	C
common mullein	<i>Verbascum thapsus</i>	none	not listed	C
dalmation toadflax	<i>Linaria genistifolia</i> ssp. <i>dalmatica</i>	Moderate	x	B
field bindweed	<i>Convolvulus arvensis</i>	none	not listed	C
Mediterranean sage	<i>Salvia aethiopsis</i>	High	not listed	A
redstem stork's bill	<i>Erodium cicutarium</i>	none	not listed	B
Russian olive	<i>Elaeagnus angustifolia</i>	High	not listed	B
smooth brome	<i>Bromopsis inermis</i>	Moderate	not listed	not listed

The Colorado Noxious Weed Act §§ 35-5.5-101 through 119, C.R.S. (2003) states that “List A species are species for which the Commissioner of Agriculture has designated for eradication. List B noxious weed species are species for which the Commissioner of Agriculture, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plans designed to stop the continued spread of these species. List C weed species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, will develop and implement state noxious weed management plans designed to support the efforts of local governing bodies to facilitate more effective integrated weed management on private and public lands. The goal of such plans will not be to stop the continued spread of these species but to provide additional education, research, and biological control resources to jurisdictions that choose to require management of List C species.”

WILDLIFE

GENERAL DESCRIPTION

The property provides habitat for a variety of wildlife species associated with shortgrass prairie and agricultural lands in Boulder County. Typical bird species likely include song sparrow (*Melospiza melodia*), vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*) and potentially grasshopper sparrow (*Ammodramus savannarum*), savannah sparrow (*Passerculus sandwichensis*), and lark sparrow (*Chondestes grammacus*). Small rodents that probably occur along the ditches include deer mouse (*Peromyscus maniculatus*), house mouse

(*Mus musculus*), and western harvest mouse (*Reithrodontomys megalotis*). Other mammals that occur or are likely to occur on the property include mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), and raccoon. All of these species probably frequent the areas along the ditches, although coyote may be more common in open areas.

Several areas on the property have been occupied in the past by prairie dogs, though no active colonies were observed during the site visit. Inactive prairie dog colonies have potential to support burrowing owl (*Athene cunicularia*).

THREATENED, ENDANGERED, OR CANDIDATE WILDLIFE SPECIES

According to the Colorado Division of Wildlife Natural Diversity Information Source (NDIS) and CNHP databases for the area, there are no threatened or endangered species on the property (NDIS 2008). However, the upper (western) portions of the property are contained within the Table Mountain Potential Conservation Area, which is considered by CNHP to have Very High Biodiversity Significance (B2) (CNHP 2007).

COLORADO DIVISION OF WILDLIFE DESIGNATIONS

According to the NDIS database, most of the property is considered to be mule deer winter range, and is also considered to be within a human conflict area for black bear (*Ursus americanus*) (NDIS 2008). However, the property does not contain suitable habitat for black bear.

BOULDER COUNTY COMPREHENSIVE PLAN DESIGNATIONS

The property does not contain any county-designated Critical Wildlife Habitats or other designations related to wildlife.

CULTURAL RESOURCES

OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION FILE SEARCH

The Colorado Historical Society Office of Archaeology and Historic Preservation conducted a search of the Colorado Inventory of Cultural Resources database for the property (OAHF 2008). This database contains information on documented federal or state studies or findings regarding any cultural resources. According to the search, no sites or surveys have been conducted on the property (OAHF 2008). Other potential unidentified cultural resources may exist within the property boundaries.

OTHER RESOURCES AND DESIGNATIONS

The property and it is not located within any areas designated for cultural resources in the Boulder County Comprehensive Plan; however, archeologically sensitive areas associated with Table Mountain do occur along the western edge of the property (Boulder County 2008b).

AGRICULTURE

AGRICULTURAL USE

The irrigated pasture in the east-central portion of the property is leased and actively managed for agriculture. This area is irrigated from the North Toll Gate Ditch which enters the northwest

corner of the property. The area below the Table Mountain Ditch in the southeast corner of the property is useable for irrigated pasture and grazing.

INFRASTRUCTURE

The property is bounded on all sides by barbed-wire fences. The fence along the western boundary is in marginal condition and is down in several locations. The north boundary fence is out in several locations where it crosses steep ravines. The south boundary fence is reinforced with chicken wire (to keep prairie dogs off the adjacent property). Several internal fences divide the property into various segments.

Two primary ditches cross the property. The Table Mountain Ditch contours through the southeast corner of the property. A headgate near the east boundary feeds a small lateral ditch. A lateral of the North Toll Gate Ditch enters the northwest corner of the property and traverses along the west property boundary. From an old ditch blowout near the adjacent satellite antennae, the ditch water cascades down the slope through a series of ravines before it is diverted into the pasture areas.

BOULDER COUNTY COMPREHENSIVE PLAN DESIGNATIONS

The Boulder County Comprehensive Plan has identified portions of the property to be Significant Agricultural Lands – Lands of Statewide Importance and Lands of Local Importance (Boulder County 2008c).

RECREATION

Public access is not permitted on the property. Prior to public ownership, the property was privately owned and was not open to public access. No evidence of recreational access or use was observed on the property during the site visit.

PROPERTY INFRASTRUCTURE

STRUCTURES

No structures exist on the property.

INFRASTRUCTURE AND UTILITIES

Fences and ditches on the property are described above under *Agriculture*.

No utilities were observed on the property.

ROADWAYS AND TRAILS

A faint two-track access road enters the property along the east boundary and winds up the slope to access the water control/diversion structures near the northwest corner of the irrigated pasture area. Another faint two-track road enters the property from the south, along the Table Mountain Ditch.

LEGAL CONSIDERATIONS

WATER RIGHTS

Purchase of the property included 75 shares of Left Hand Ditch Company water, and carriage rights to the North Toll Gate Ditch.

MINERAL RIGHTS

Purchase of the property included all mineral rights, including sand and gravel, coal, and oil and gas owned by seller.

EASEMENTS AND RIGHTS-OF-WAY INFORMATION

Boulder County owns two separate easements (conservation easement and NUPUD Outlot) on the property. The NUPUD Outlot includes the southern portion of the property (south of the irrigated pasture area). See OSMP property file.

LOCAL PLANNING DESIGNATIONS

The entire property is currently zoned Agriculture (Boulder County 2008d).

Boulder County Comprehensive Plan designations on the property include—

- Table Mountain – Environmental Conservation Area
- Table Mountain – Natural Landmark
- Significant Agricultural Land – Lands of Statewide Importance

The property is also considered to have minor to moderate geologic constraints due to expansive soils or the potential for landslides, mudslides, mudfalls, or debris fans.

PROPERTY MANAGEMENT PLAN

MANAGEMENT AREA DESIGNATION

Recommended management area designation: Natural Area

The location and features of the property are generally consistent with the characteristics, goals, and strategies outlined for Natural Areas in the OSMP Visitor Master Plan, including variable condition of natural ecosystems, varying levels of visitor use opportunities, and compatibility with adjacent land uses (OSMP 2005). This management area designation is consistent with the historic and current uses of the property and its primary open space values, and with the management designation of other nearby OSMP properties.

PUBLIC ACCESS

Recommended status: Closed

The property is managed for agricultural use and contains occurrences of Bells twinpod, a rare plant species.

The property will remain closed because it is isolated and not connected to a larger open space area, there is no visitor infrastructure, and property infrastructure is not complete. Public access and facilities on this property will be evaluated further in a future Trail Study Area or other planning processes.

MANAGEMENT ISSUES

The following management issues were identified on the property based on observations during the site visit, existing documentation, and input from OSMP staff.

Noxious weeds. The property contains one List A noxious weeds species (Mediterranean sage), four List B species, and several List C species. While most of the noxious weed species are typical of agricultural and open space properties in the region, Mediterranean sage is a high priority species for both OSMP and the State of Colorado, and should be aggressively managed to prevent its spread.

Ditch maintenance. At the site of an old ditch blowout on the upper (western) slopes of the property, the Toll Gate Ditch rapidly cascades down a series of ravines before being diverted to the various irrigated areas on the property. While this arrangement appears to work for the short term, it is likely to result in significant erosion, downcutting, and other long-term issues that may degrade other resource values and limit the ability of OSMP or agricultural lessees to manage the system.

Fencing. Several portions of the barbed-wire fence along the western boundary are down or are in poor condition.

Neighbor encroachment. Impacts from neighboring properties, including prairie dog poisoning, skeet shooting, and other illegal activities have been evident in the past.

Trash/debris. Many of the small gullies and drainages on the upper slopes of the property contain debris associated with the adjacent Table Mountain Field Site and past agricultural uses. This debris is typical of many agricultural lands on Boulder County, and does not constitute a significant management issue. However, besides aesthetic considerations, debris piles can provide a foothold for noxious weeds and if it is scattered near a public right-of-way (55th Street), it could also attract additional illegal dumping.

MANAGEMENT STRATEGIES

Management objectives and recommended management actions for various resources on the property are outlined below. In general, management objectives are a concise statement of what OSMP wants to achieve in protecting open space values, addressing management issues related to a particular resource type. Management actions are the specific tasks or tools that can be used to fulfill the objective and address the issue.

VEGETATION

Objective 1: Target and control Mediterranean sage on the property, with the goal of eradication.

Action: Implement efforts to aggressively control Mediterranean sage.

Action: Conduct follow-up monitoring and treatments to ensure effectiveness.

Objective 2: Prevent the spread of other noxious weeds from current conditions documented in the resource assessment.

Action: Continue control efforts for other noxious weeds identified on the property.

Action: Work with agricultural lessee and ditch maintenance entity to manage agricultural infrastructure in a manner that reduces the potential for noxious weeds.

Action: Provide follow-up monitoring and weed control.

Objective 3: Identify and protect any occurrences of Bell's twinpod (*Physaria bellii*) or other rare plant species on the property.

Action: Conduct targeted surveys to confirm extent of Bell's twinpod populations (or other species) on the property.

Action: Consider additional measures (e.g., additional use restrictions/enforcement, habitat management/restoration) to protect the population.

Objective 4: Coordinate long-term management with sensitive breeding periods for wildlife.

Action: Minimize disturbance (burning, mowing, grazing, and chemical spraying) during the nesting season for grassland birds.

Objective 5: Identify opportunities for habitat restoration on the property.

Action: Evaluate potential for restoring saltbush/winterfat/western wheatgrass community in southern portion of property.

Action: Manage future grazing activity, if any, in a manner that is compatible with habitat restoration objectives.

FENCING AND SIGNING

Objective 1: Identify property as OSMP land through clear and defined fencing and signing of the property boundary.

Action: Install OSMP signs along property boundary.

Objective 2: Conduct routine fence repair and maintenance along the property boundary.

Action: Repair areas of downed or missing fence along the west and north boundaries, particularly in areas that could facilitate trespass livestock from adjacent lands.

Action: Monitor the condition and effectiveness of fencing every 1-3 years.

AGRICULTURAL MANAGEMENT

Objective 1: Investigate and address potential problems associated with the Toll Gate Ditch channel and subsequent resource concerns.

Action: Work with the agricultural lessee to characterize any issues and develop appropriate management responses (e.g., restoration of original ditch, bank stabilization, or pipe).

Action: Monitor the condition of the ditch channel and any potential improvements for resource damage and/or effectiveness of management responses.

Action: Install diversion structures to allocate water to irrigated fields on the property.

WILDLIFE MANAGEMENT

Objective 1: Manage prairie dogs consistent with vegetation and agricultural objectives for the property.

Action: Evaluate prairie dog colony for use by burrowing owl and golden eagle.

Action: Designate management based on criteria established in the Grassland Ecosystem Management Plan.

CONSERVATION AND COORDINATION

Objective 1: Seek opportunities to provide long-term conservation to the remainder of the Table Mountain slope and its associated resources.

Action: If possible, acquire fee ownership or a conservation easement over portions of the adjacent properties to the south.

Objective 2: Work with the Table Mountain Field Site (U.S. Department of Commerce), Boulder County, and other landowners to provide consistent, sustainable management to the greater Table Mountain/Lykins Gulch area.

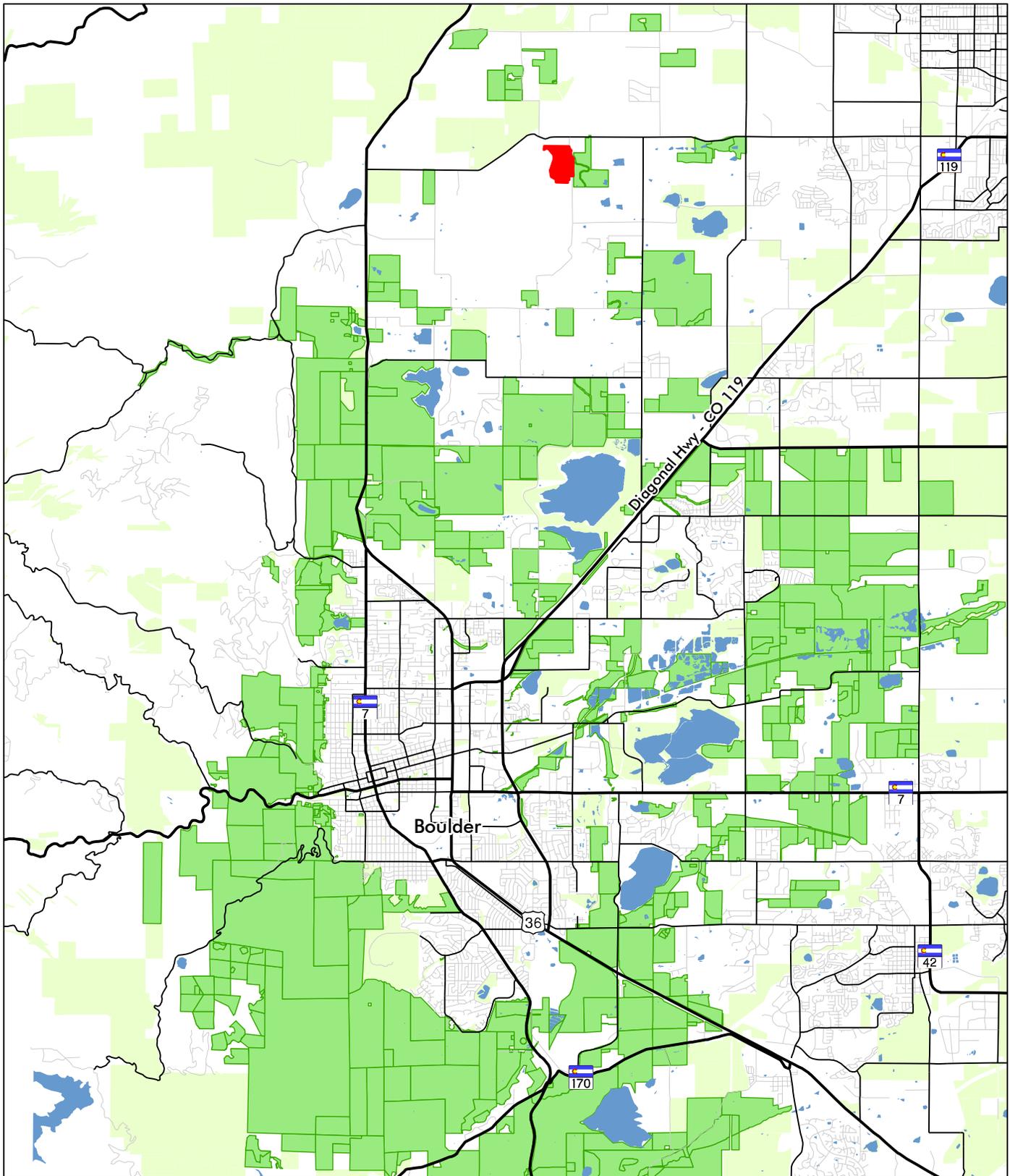
Action: Establish and maintain lines of communication with adjacent landowners.

Action: Monitor resource conditions (e.g., weeds, prairie dogs) on adjacent properties and identify potential issues or opportunities.

RAPID RESOURCE ASSESSMENT AND MANAGEMENT PLAN
STEELE OPEN SPACE
BOULDER COUNTY, COLORADO

Action: Allow OSMP to become a resource for landowners seeking knowledge or advice on various land management topics.

FIGURES



ERO Resources Corp.
 1842 Clarkson Street
 Denver, CO 80218
 (303) 830-1188
 Fax: (303) 830-1199

Steele Property RRA and Management Plan

- Steele Property
- City of Boulder Open Space
- Other Open Space

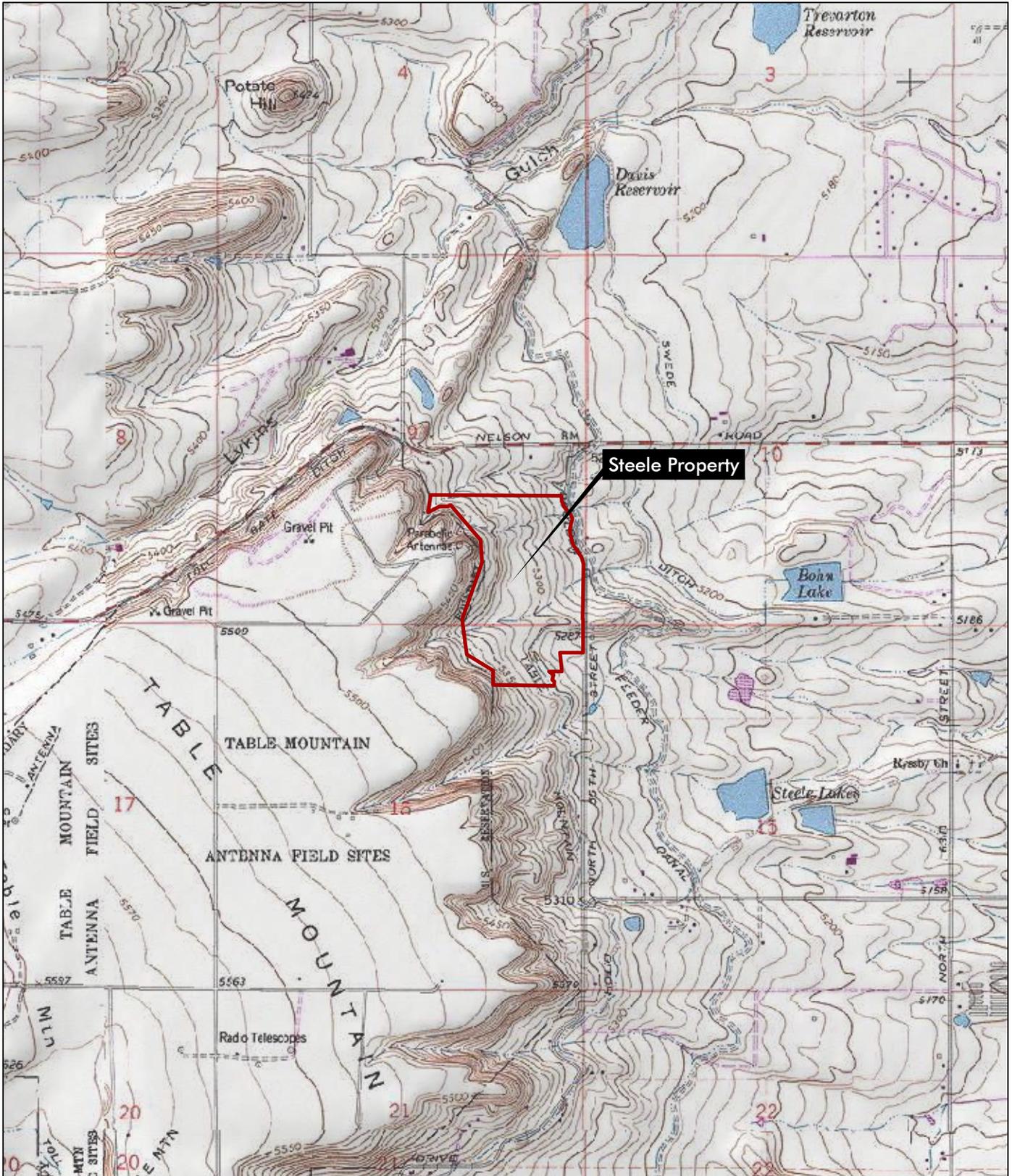


1 inch = 2 miles



**Figure 1
 Vicinity Map**

Prepared for: City of Boulder Open Space
 and Mountain Parks
 File: 4089 Figure1.mxd
 March 2008



ERO Resources Corp.
 1842 Clarkson Street
 Denver, CO 80218
 (303) 830-1188
 Fax: (303) 830-1199

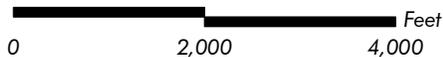
Steele Property RRA and Management Plan

Sections 9 & 16, T2N, R70W

UTM NAD83 Coordinate Zone 13N; 480498mE, 4444046mN

USGS Hygiene CO, Quadrangle

Boulder County, Colorado

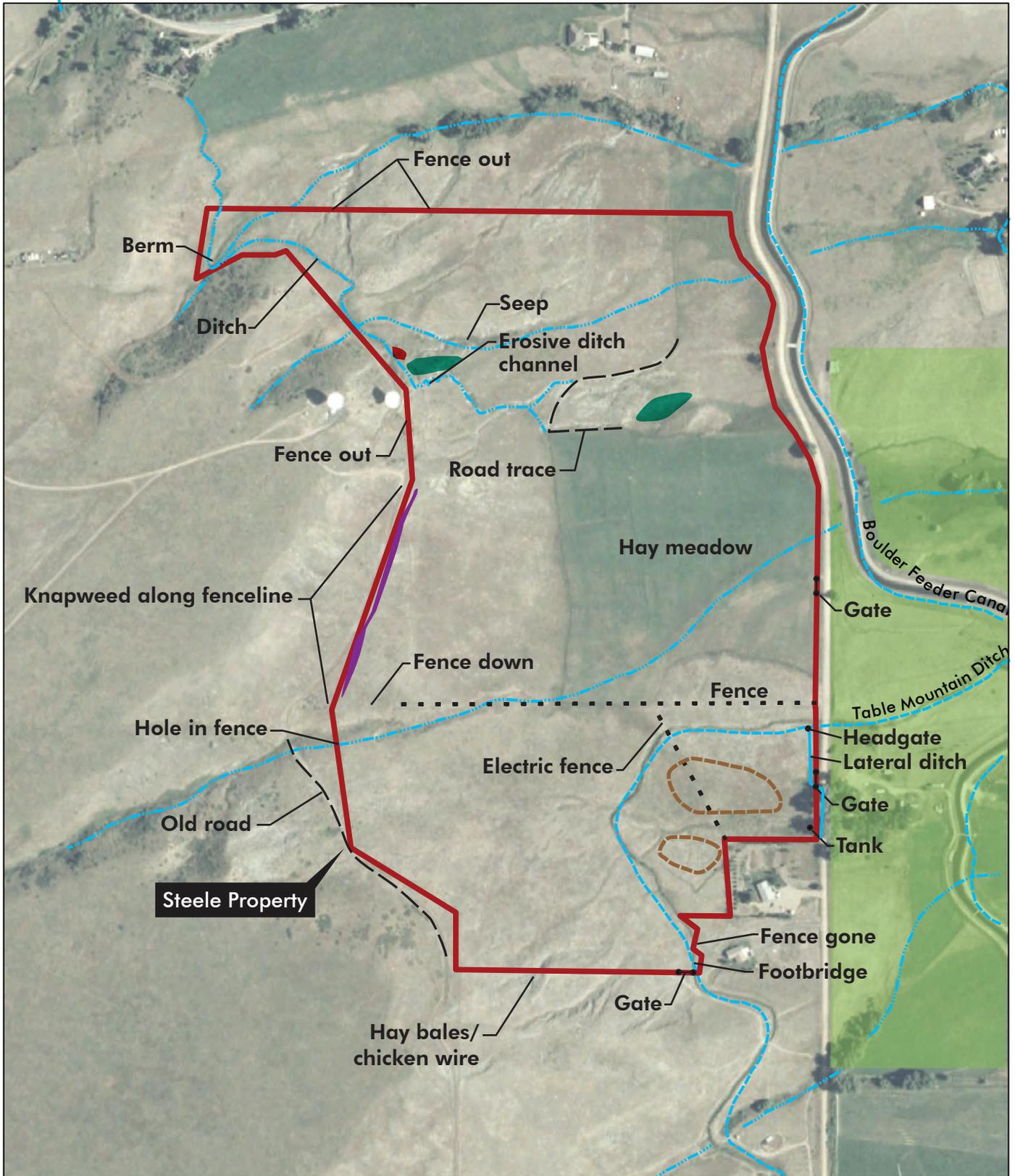


1 inch = 2,000 feet



**Figure 2
 Location**

Prepared for: City of Boulder Open Space
 and Mountain Parks
 File: 4089 Figure 2.mxd
 February 2008

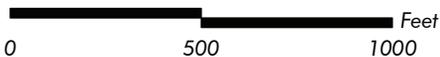


ERO

ERO Resources Corp.
 1842 Clarkson Street
 Denver, CO 80218
 (303) 830-1188
 Fax: (303) 830-1199

Steele Property RRA and Management Plan

- City of Boulder Open Space
- Other Open Space
- Bell's twinpod
- Mediterranean sage
- Weed patch
- Inactive prairie dog colony

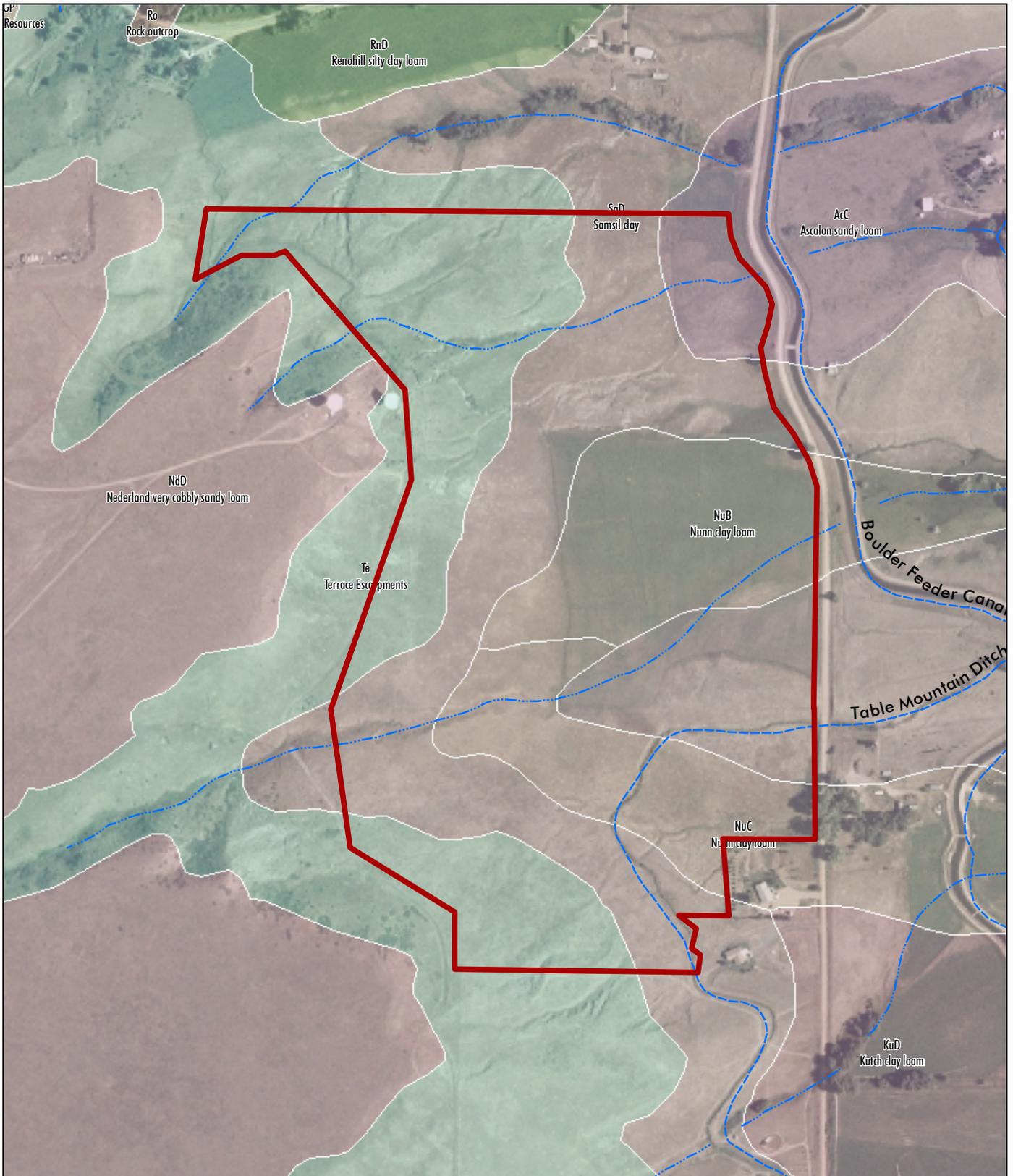


1 inch = 500 Feet



**Figure 3
 Property Features**

Prepared for: City of Boulder Open Space
 and Mountain Parks
 File: 4089 Figure 3 Steele.pdf
 July 2008



ERO Resources Corp.
 1842 Clarkson Street
 Denver, CO 80218
 (303) 830-1188
 Fax: (303) 830-1199

Steele Property RRA and Management Plan

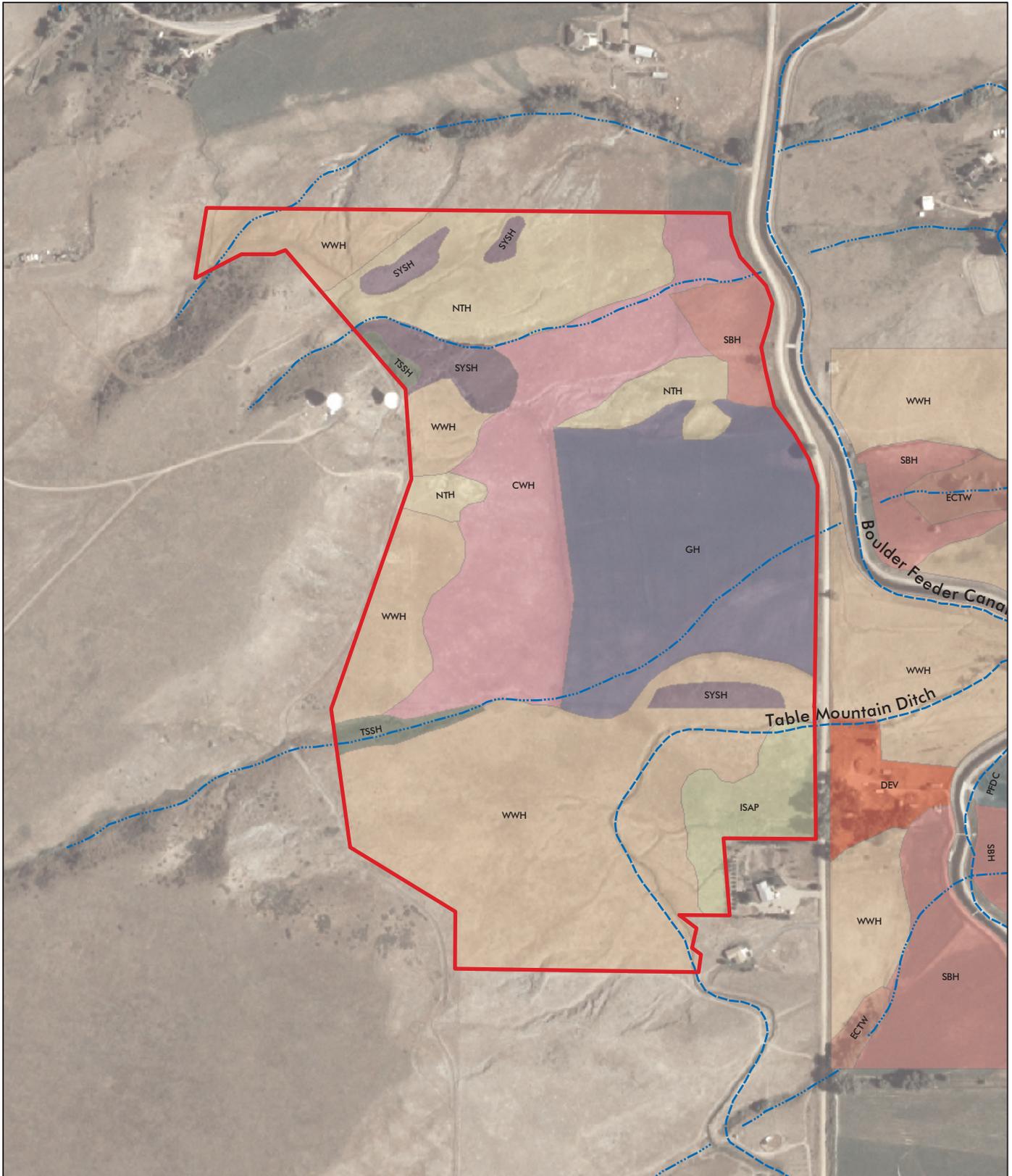


1 inch = 500 Feet



**Figure 4
 Soils**

Prepared for: City of Boulder Open Space
 and Mountain Parks
 File: 4089 Figure 4.mxd
 February 2008



ERO Resources Corp.
 1842 Clarkson Street
 Denver, CO 80218
 (303) 830-1188
 Fax: (303) 830-1199

Steele Property RRA and Management Plan

(See following page for for vegetation community names)



1 inch = 500 Feet



Figure 5 Vegetation Communities

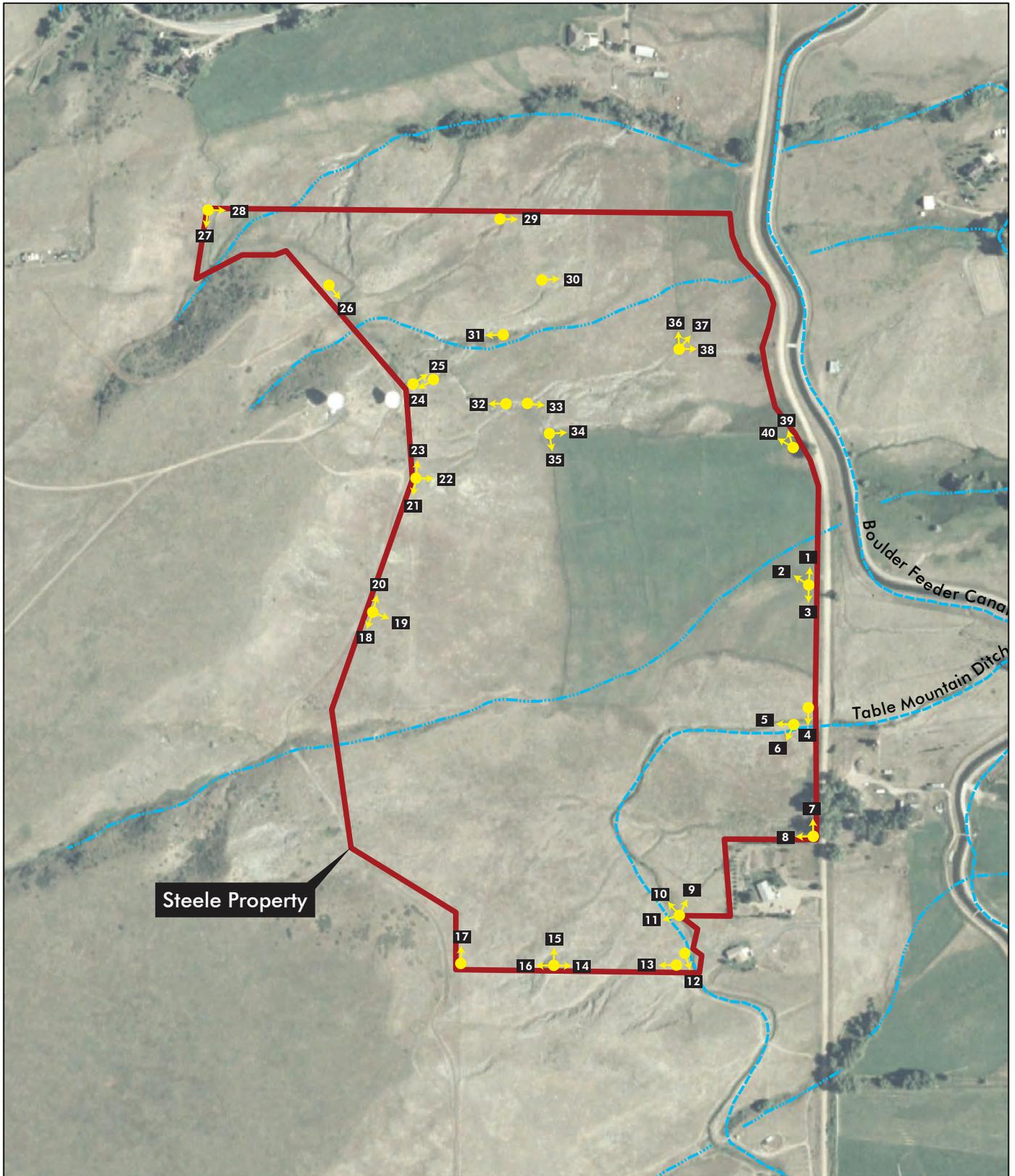
Prepared for: City of Boulder Open Space
 and Mountain Parks
 File: 4089 Figure 5.mxd
 June 2008

Vegetation Communities

Acronym, CmnName

	ADUD, Annual-dominant Upland Disturbance
	APS, American Plum Shrubland Alliance
	BBYH, Big Bluestem - (Yellow Indiangrass) Herbaceous Alliance
	BRSR, Baltic Rush Seasonally Flooded Herbaceous Alliance
	CFSH, Clustered Field Sedge Seasonally Flooded Herbaceous Alliance
	CHSH, Cattail Herbaceous Semipermanently Flooded Alliance
	CTH, Canada Thistle Weedy Forb Great Plains Herbaceous Vegetation [Provisional]
	CWH, Crested Wheatgrass Semi-Natural Herbaceous Alliance
	CWTS, (Coyote Willow, Sandbar Willow) Temporarily Flooded Shrubland Alliance
	CWW, Crack Willow (introduced) Temporarily Flooded Woodland Alliance
	DCAP, Disturbed Cultivated Agricultural Pasture
	DEV, Developed
	DFF, Douglas Fir Forest Alliance
	DFW, Douglas-fir Woodland Alliance
	ECTW, Eastern Cottonwood Temporarily Flooded Woodland Alliance
	ESSH, Emory Sedge Seasonally Flooded Herbaceous Alliance
	ETCW, Eastern Cottonwood Temporarily Flooded Woodland Alliance
	FBH, Foxtail Barley Temporarily Flooded Herbaceous Alliance
	FH, (Tall Fescue, Meadow Fescue) Herbaceous Alliance
	FSBH, Fourwing Saltbush Herbaceous Alliance
	GAH, Cultivated Alfalfa / Smooth Bromegrass Hay
	GH, Cultivated Grass Hay
	IC, Irrigated Cropland
	ISAP, Introduced Species Agricultural Pasture
	KBH, Kentucky Bluegrass Semi-Natural Herbaceous Alliance
	NNH, New Mexico Needlegrass Herbaceous Alliance
	NSH, Nebraska Sedge Seasonally Flooded Herbaceous Alliance
	NTH, Needle-and-Thread - Blue Grama Herbaceous Alliance
	OT, Ornamental Trees
	PDFF, Ponderosa Pine - Douglas-fir Forest Alliance
	PDFW, Ponderosa Pine - Douglas-fir Woodland Alliance
	PFDC, Perennial Forb Disturbance Community
	PMTH, Ponderosa Pine Wooded Mixed Herbaceous Alliance (Savannah)
	PPF, Ponderosa Pine Forest Alliance
	PPW, Ponderosa Pine Woodland Alliance
	PTSH, Ponderosa Pine Tallgrass Savannah Herbaceous Alliance
	PTW, Ponderosa Pine Temporarily Flooded Woodland Alliance
	QADF, Quaking Aspen - Douglas-fir Forest Alliance
	ROW, Russian Olive Semi-Natural Woodland Alliance
	SBH, Smooth Bromegrass Semi-Natural Herbaceous Alliance
	SDS, Snakeweed Dwarf-shrubland Alliance
	SKBH, Sun Sedge-Agassiz Kentucky Bluegrass Herbaceous
	SYS, Soapweed Yucca Evergreen Shrubland
	SYSH, Soapweed Yucca Shrub Savannah Herbaceous Alliance
	THA, Threesquare Herbaceous Alliance
	TSIS, Ill-scented Sumac Intermittently Flooded Shrubland Alliance
	TSSH, Three-leaved Sumac Shrub Savannah Herbaceous Alliance
	TSUS, Three-leaved Sumac Upland Shrubland Alliance
	WATER, Water
	WBSS, Water Birch Seasonally Flooded Shrubland Alliance
	WTFH, Western Wheatgrass Temporarily Flooded Herbaceous Alliance
	WWH, Western Wheatgrass Herbaceous Alliance

APPENDIX A
PHOTO POINT MAP AND DOCUMENTATION



ERO Resources Corp.
 1842 Clarkson Street
 Denver, CO 80218
 (303) 830-1188
 Fax: (303) 830-1199

Steele Property RRA and Management Plan

●→ Photo Point



1 inch = 500 Feet



**Appendix A
 Photo Points**

Prepared for: City of Boulder Open Space
 and Mountain Parks
 File: 4089 Steele Photo points.pdf
 July 2008

APPENDIX B
PLANT SPECIES

Common Name	Species Name	Synonym	Western Wheatgrass Herbaceous Alliance (WWH)	Three-leaved Sumac Shrub Savannah Herbaceous Alliance (TSSH)	Crested Wheatgrass Semi-Natural Herbaceous Alliance (CWH)	Cultivated Alfalfa/ Smooth Brome Hay (GAH)	Needle-and-Thread - Blue Grama Herbaceous Alliance (NTH)	Soapweed Yucca Shrub Savannah Herbaceous Alliance (SYSH)	Smooth Brome Semi-Natural Herbaceous Alliance (SBH)	Introduced Species Agricultural Pasture (ISAP)
Native Annual/Biennial Forbs										
curlycup gumweed	Grindelia squarrosa		■		■		■		■	■
sleepy silene	Silene antirrhina		■							■
spreading fleabane	Erigeron divergens		■	■				■		
wavyleaf thistle	Cirsium undulatum		■				■			
western tansymustard	Descurainia pinnata			■						
Introduced Annual/Biennial Forbs										
common mullein	Verbascum thapsus		■						■	■
common pepperweed	Lepidium densiflorum									■
cutleaf vipergrass	Podospermum laciniatum	Scorzonera laciniatum	■							■
flatspine stickseed	Lappula redowskii		■							■
littlepod false flax	Camelina microcarpa		■							■
Mediterranean sage	Salvia aethiopis		■				■	■		■
prickly Russian thistle	Salsola australis	Salsola iberica								
redstem stork's bill	Erodium cicutarium		■		■	■			■	■
smallflowered alyssum	Alyssum parviflorum	Alyssum simplex	■	■	■		■	■	■	■
tall tumblemustard	Sisymbrium altissimum		■		■			■		■
Native Annual Grasses										
sixweeks fescue	Vulpia octoflora	Festuca octoflora		■						

Common Name	Species Name	Synonym	Western Wheatgrass Alliance (WWH)	Three-leaved Sumac Shrub Savannah Herbaceous Alliance (TSSH)	Crested Wheatgrass Semi-Natural Herbaceous Alliance (CWH)	Cultivated Alfalfa/Smooth Brome Hay (GAH)	Needle-and-Thread - Blue Grama Herbaceous Alliance (NTH)	Soapweed Yucca Shrub Savannah Herbaceous Alliance (SYSH)	Smooth Brome Semi-Natural Herbaceous Alliance (SBH)	Introduced Species Agricultural Pasture (ISAP)
Introduced Annual Grasses										
cheatgrass	Anisantha tectorum	Bromus tectorum								
Japanese brome	Bromus japonicus	Bromus arvensis	■				■	■		
Native Perennial Forbs										
Bell's twinpod	Physaria bellii						■	■		
Britton's skullcap	Scutellaria brittonii			■						
broomlike ragwort	Senecio spartioides		■							
common starlily	Leucocrinum montanum						■			
Cuman ragweed	Ambrosia psilostachya var. coronopifolia		■	■	■					■
Fendler's sandmat	Chamaesyce fendleri		■				■	■		
foothill milkvetch	Orophaca tridactylca	Astragalus tridactylicus					■	■		
hairy false goldenaster	Heterotheca villosa		■	■			■			
Howard's evening-primrose	Oenothera howardii	O. jamesii					■			
Kansas gayfeather	Liatris punctata		■	■			■	■	■	
lacy tansyaster	Machaeranthera pinnatifida	Haplopappus spinulosus						■		
lambstongue ragwort	Senecio integerrimus		■							
little sunflower	Helianthus pumilus		■		■		■	■		

Common Name	Species Name	Synonym	Western Wheatgrass Herbaceous Alliance (WWH)	Three-leaved Sumac Shrub Savannah Herbaceous Alliance (TSSH)	Crested Wheatgrass Semi-Natural Herbaceous Alliance (CWH)	Cultivated Alfalfa/Smooth Brome Hay (GAH)	Needle-and-Thread - Blue Grama Herbaceous Alliance (NTH)	Soapweed Yucca Shrub Savannah Herbaceous Alliance (SYSH)	Smooth Brome Semi-Natural Herbaceous Alliance (SBH)	Introduced Species Agricultural Pasture (ISAP)
oppositeleaf bahia	Picradeniopsis oppositifolia						■			
pale bastard toadflax	Comandra umbellata ssp. pallida						■	■		
prairie flax	Adenolinum lewisii	Linum lewisii	■					■		
purple milkvetch	Astragalus agrestis		■							
purple prairie clover	Dalea purpurea						■	■		
rose heath	Leucelene ericoides	Chaetopappa ericoides					■	■		
rough pricklypoppy	Argemone hispida							■		
rush skeletonplant	Lygodesmia juncea						■			
scarlet beeblossom	Gaura coccinea		■				■	■		
scarlet globemallow	Sphaeralcea coccinea		■	■	■		■	■	■	■
shaggy dwarf morning-glory	Evolvulus nuttallianus		■	■			■	■		
slimflower scurfpea	Psoralidium tenuiflorum	Psoralea tenuiflora	■	■			■	■		
spike gilia	Ipomopsis spicata	Gilia spicata						■		
sulphur-flower buckwheat	Eriogonum umbellatum							■		
textile onion	Allium textile		■							
varileaf phacelia	Phacelia heterophylla						■			
western marbledseed	Onosmodium molle ssp. occidentale	Onosmodium bejariense var. occidentale	■							

Common Name	Species Name	Synonym	Western Wheatgrass Herbaceous Alliance (WWH)	Three-leaved Sumac Shrub Savannah Herbaceous Alliance (TSSH)	Crested Wheatgrass Semi-Natural Herbaceous Alliance (CWH)	Cultivated Alfalfa/Smooth Brome Hay (GAH)	Needle-and-Thread - Blue Grama Herbaceous Alliance (NTH)	Soapweed Yucca Shrub Savannah Herbaceous Alliance (SYSH)	Smooth Brome Semi-Natural Herbaceous Alliance (SBH)	Introduced Species Agricultural Pasture (ISAP)
white prairie clover	Dalea candida var. oligophylla						■	■		
white sagebrush	Artemisia ludoviciana		■		■					
Introduced Perennial Forbs										
Canada thistle	Breca arvensis	Cirsium arvense			■	■				■
dalmation toadflax	Linaria genistifolia ssp. dalmatica	Linaria dalmatica	■							
domestic iris	Iris spp. domestic		■							
field bindweed	Convolvulus arvensis		■	■	■	■	■	■	■	■
horehound	Marrubium vulgare				■					
Native Perennial Cool Season Grasses										
Indian ricegrass	Achnatherum hymenoides	Oryzopsis hymenoides, Stipa hym.					■			
western wheatgrass	Pascopyrum smithii	Agropyron smithii	■	■	■		■	■	■	
Introduced Perennial Cool Season Grasses										
crested wheatgrass	Agropyron desertorum	A. cristatum			x					
intermediate wheatgrass	Thinopyrum intermedium	Agropyron intermedium								■
Kentucky bluegrass	Poa pratensis					■			■	

Common Name	Species Name	Synonym	Western Wheatgrass Herbaceous Alliance (WWH)	Three- leaved Sumac Shrub Savannah Herbaceous Alliance (TSSH)	Crested Wheatgrass Semi- Natural Herbaceous Alliance (CWH)	Cultivated Alfalfa/ Smooth Brome Hay (GAH)	Needle- and-Thread - Blue Grama Herbaceous Alliance (NTH)	Soapweed Yucca Shrub Savannah Herbaceous Alliance (SYSH)	Smooth Brome Semi- Natural Herbaceous Alliance (SBH)	Introduced Species Agricultural Pasture (ISAP)
Introduced Trees										
Russian olive	Elaeagnus angustifolia					■				
Native Agavoids and Succulents										
soapweed yucca	Yucca glauca		■	■			■	■		
twistspine pricklypear	Opuntia macrorhiza		■	■			■	■		

APPENDIX C
REFERENCES

APPENDIX C

REFERENCES

- Boulder County. 1996. County Open Space Plan.
<<http://www.co.boulder.co.us/lu/bccp/bccpmap/osplan.pdf>> January 25.
- Boulder County. 2008a. Boulder County Assessor's Office.
<http://www.co.boulder.co.us/assessor/asrproprecords/assess_input.asp>. January 24.
- Boulder County. 2008b. Boulder County Comprehensive Plan, Archaeologically Sensitive Areas. <http://www.co.boulder.co.us/lu/bccp/cult_res.htm>. January 25.
- Boulder County. 2008c. Boulder County Comprehensive Plan, Significant Agricultural Land. <<http://www.co.boulder.co.us/lu/bccp/images/sal.jpg>>. January 25.
- Boulder County. 2008d. Boulder County Zoning District Map.
<<http://www.co.boulder.co.us/lu/pdf/zoningmap.pdf>>. January 25.
- CDWR (Colorado Division of Water Resources). 2008. Online Mapping.
<<http://165.127.23.116/website/lttool>>. January 24.
- City of Boulder Open Space and Mountain Parks (OSMP). 2005. Visitor Master Plan.
- CNHP. (Colorado Natural Heritage program). 2007. Potential Conservation Area GIS database.
- NDIS (Natural Diversity Information Source). 2008. GIS mapping of significant habitat elements for various wildlife species. Prepared by the Colorado Division of Wildlife.
- NRCS (National Resource Conservation Service). 1975. Soil Survey of Boulder County Area, Colorado. Denver, CO.
- OAHP (Colorado Historical Society, Office of Archeology and Historic Preservation). 2008. Records Search. January 28. Denver, CO.
- Tweto, Ogden. 1979. Geologic Map of Colorado. U.S. Geological Survey. Denver, CO.
- USGS (U.S. Geological Survey). 1967, photorevised 1979. Niwot Quadrangle. Denver, CO.

PHOTO POINTS
STEELE



Photo 1 - View north from access gate along east boundary.



Photo 2 - View west from access gate along east boundary.

**PHOTO POINTS
STEELE**



Photo 3 - View south from access gate along east boundary.



Photo 4 - Ditch, headgate and southeast property corner, looking south.

PHOTO POINTS
STEELE



Photo 5 - Table Mountain Ditch from east boundary, looking west.



Photo 6 - Headgate near east property boundary.

PHOTO POINTS
STEELE



Photo 7 - View north from southeast corner.



Photo 8 - View west from southeast corner.

PHOTO POINTS
STEELE



Photo 9 - View northeast from internal corner near south boundary.



Photo 10 - View northwest from internal corner near south boundary.

PHOTO POINTS
STEELE



Photo 11 - View southwest from internal corner near south boundary.



Photo 12 - Footbridge across Table Mountain Ditch near south boundary.

**PHOTO POINTS
STEELE**



Photo 13 - View west along south boundary.



Photo 14 - View east from south-central boundary.

PHOTO POINTS
STEELE



Photo 15 - View north from south-central boundary.



Photo 16 - View west along boundary towards southwest corner.

PHOTO POINTS
STEELE



Photo 17 - View north from southwest corner.



Photo 18 - View south along west boundary.

PHOTO POINTS
STEELE



Photo 19 - View east across property from west-central boundary.



Photo 20 - View north along west boundary.

PHOTO POINTS
STEELE



Photo 21 - View south along west boundary.



Photo 22 - View east from west boundary.

PHOTO POINTS
STEELE



Photo 23 - View north along west boundary.



Photo 24 - Ditch blowout/diversion near west boundary, looking west.

PHOTO POINTS
STEELE



Photo 25 - Ditch blowout/diversion near west boundary, looking east.



Photo 26 - Ditch along west property boundary, looking southeast.

PHOTO POINTS
STEELE



Photo 27 - View from northwest corner, looking south.



Photo 28 - View from northwest corner, looking east.

PHOTO POINTS
STEELE



Photo 29 - View east along north boundary.



Photo 30 - View towards northeast corner.

PHOTO POINTS
STEELE



Photo 31 - Old steel drum and seep area in small drainage, looking west.



Photo 32 - Small ravine with scattered debris and small trees, looking west.

PHOTO POINTS
STEELE



Photo 33 - Diversion point along ditch in north portion of property.



Photo 34 - North boundary of irrigated field, looking east.

PHOTO POINTS
STEELE



Photo 35 - West boundary of irrigated field, looking south.



Photo 36 - Lateral ditch diversion and irrigation equipment, northeast corner.

PHOTO POINTS
STEELE



Photo 37 - View of northeast corner of property.



Photo 38 - View of east boundary, northeast portion of property.

PHOTO POINTS
STEELE



Photo 39 - View north along northern portion of east boundary.



Photo 40 - View west from northern portion of east boundary.

PHOTO POINTS
STEELE



Photo 41 - Bells twinpod identified in north-central area of property.